

PERFORMING
UNDER PRESSURE

CWNA/CWHGB
Booster
Compressors

 **Crownwell**



- CROWNWELL is a professional compressor manufacturer in the world, located in Shanghai covering an area of 10000 m2 and we have ability to design, manufacture and test high compressors under 400KW .
- We specialize in the design, processing and manufacturing of gas compressors. Our business idea is to offer most reliable compressors, professional and economical solutions.
- We have passed ISO9000, GC, HSE audit. We successfully became Certified suppliers of CNPC, CNOOC and SINOPEC and we have a solid reputation for high quality products.



Crownwell Specialists in Medium and High Pressure Compression

For different gas applications



Applications

- Air Separation
- Air Booster
- Nitrogen booster
- Rubber tires
- Aerospace
- Defence
- Marine
- Oil field
- Chemical industry

Committed to providing high-quality gas compressor products, the production and processing of core components in CROWNWELL compressors are independently completed within CROWNWELL factory.

Sophisticated processing equipment and rigorous inspection methods ensure the consistent quality of each component.

The careful selection of materials and components ensures that each CROWNWELL compressor operates **efficiently** and reliably under the most demanding operating conditions.

From compressor block, compressor package to gas systems, CROWNWELL offers a diverse range of products and services to meet the diverse needs of customers.



CWNA Series Booster Compressors

[Overview Product Range]

CROWNWELL CWNA series **boosters** provide you with an integrated solution suitable for various purposes. Whether it is the adsorption nitrogen production method, membrane separation nitrogen production method, or direct gas supply from a nitrogen bottle, it can easily be perfectly matched with our **booster** system.

CWNA series Air/Nitrogen boosters

The intake pressure of the gas source does not need to be reduced, and it is directly pressurized to avoid the increase in energy consumption caused by intake pressure reduction, ensuring that every part of your gas can be efficiently compressed.

According to different operating conditions and pressure ratios, various types of **blocks** can be provided from **one stage compression** to **three stage compression**, providing the best choice for different **applications**.

The fully air-cooled design eliminates the complexity of the cooling water system, saving you valuable space and initial investment, greatly reducing installation costs.

From the intake buffer tank, blocks, air storage system, filtration system, distributor, and air control panel, a fully configured system provides you with an integrated solution.

According to different usage environments, a silent design can be provided for your on-site work.

Explosion-proof booster system **is available** for hazardous environments



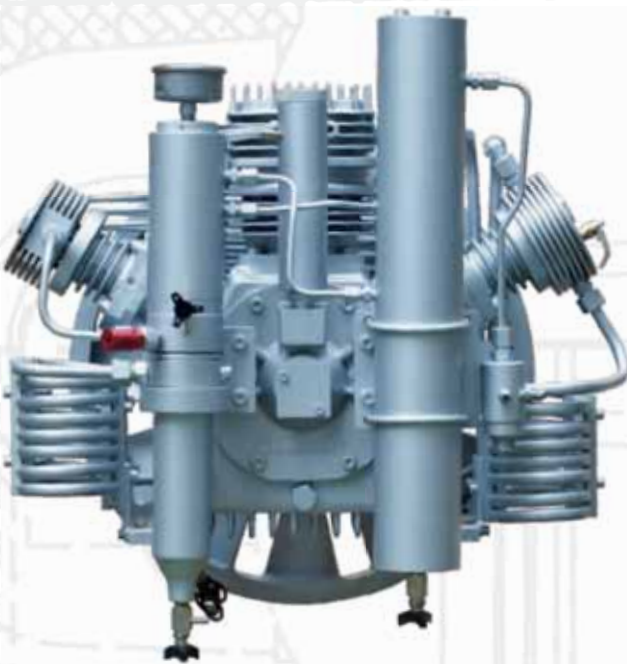
Compact design

- Frame integrated design, highly integrated, light weight and compact.
- Fully automatic drain system and drain collection system, clean and environmentally friendly.
- With electrical control system, economical and durable.

Various

Design version

Booster design block, with an intake pressure of 0-20Bar, without the need for pressure reduction. The maximum discharge pressure is 350Bar.



Single stage, two stage and three stage compressions are available.

Stainless steel intercoolers and aftercooler, cylinders with deep fins and aluminum cylinder heads, as well as flywheels with true fan blades, all provide good cooling for the unit, reducing its operating and discharge temperatures.

Low-pressure forced feed lubrication system ensures sufficient lubrication of the high-pressure stage. The oil pump is a heavy-duty gear type pump driven by the crankshaft with an oil filter to remove impurities from the oil circuit. The design of the entire lubrication system improves the life of the operating components of the unit.

The entire machine adopts high-quality components and low friction coefficient bearings, providing smooth operation and reducing power consumption; The front and rear bearings of the crankshaft are precisely aligned, extending the life of the crankshaft; Stainless steel valve plate is wear-resistant and has good heat dissipation; Nickel plated seats are more corrosion-resistant.



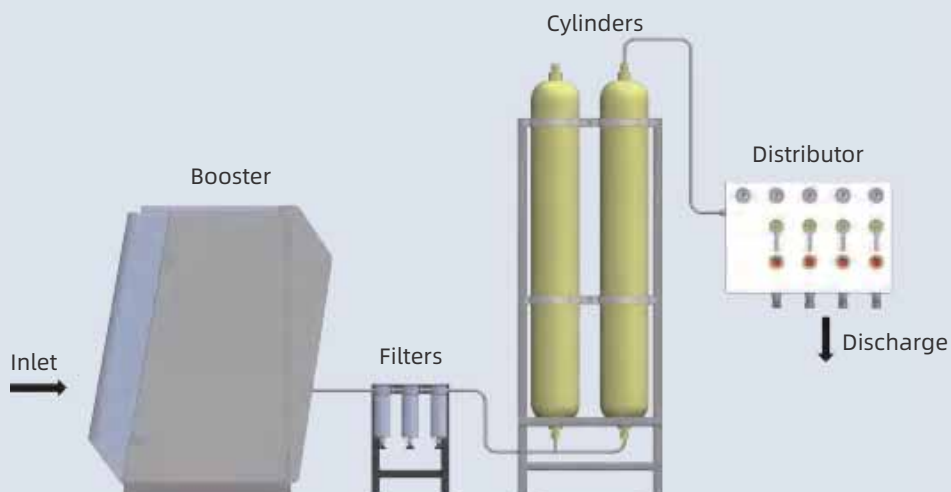
Silent design

- Vertical design, small footprint.
- The cabinet with super silent design, low noise.
- Aerodynamic design, efficient cooling channel, reserved air duct interface, can lead hot air to the outdoor.
- Fully automatic drain system and drain collection system, clean and environmentally friendly.
- Automatic PLC control system with HMI.

Booster Compressor System with a Reputation for **Innovation, Quality and Reliability**

[Custom Built Skid-Mounted Booster Compressor System]

- The entire machine adopts a small mounted design, with a compact structure, high integration, small footprint, and easy installation.
- A complete intake system, including pressure protection, filtration, **control valve** and other components, ensures the safe and reliable operation of the compressor.
- A reliable compressor block without the need for **suction** pressure reduction, with high efficiency and low power consumption.
- Real-time monitoring of suction pressure and discharge pressure.
- Fully automatic drain system and drain collection system, clean and environmentally friendly.
- Compact design with electrical control system.
- Silent design with PLC control system and touch screen.
- Optional filtration systems with different filters are available.
- Optional distributor and pneumatic control systems are available
- Turnkey solutions are available according to the requirements.



[SPECIFICATIONS]

Model	Suction Pressure Bar	Discharge Pressure Bar	Flow m³/min	Power kw	Dimensions mm	Weight kg
COMPACT design						
CWNA1-6/15ETB	6	15	1	3	1228*593*714	123
CWNA1.5-6/15ETB	6	15	1.5	4		125
CWNA2-6/15ETB	6	15	2	5.5		128
CWNA1-6/25ETB	6	25	1	5.5		126
CWNA1.5-6/25ETB	6	25	1.5	7.5		130
CWNA0.5-6/30ETB	6	30	0.5	4		125
CWNA1-6/30ETB	6	30	1	5.5		128
CWNA1.5-6/30ETB	6	30	1.5	7.5		130
CWNA0.5-6/50ETB	6	50	0.5	4		128
CWNA1-6/50ETB	6	50	1	7.5		130
CWNA0.5-6/100ETB	6	60-100	0.5	5.5		128
CWNA0.8-6/100ETB	6	60-100	0.8	7.5		130
CWNA0.5-6/200ETB	6	100-200	0.5	7.5		132
CWNA0.5-6/350ETB	6	200-350	0.5	7.5		132
SILENT design						
CWNA0.5-6/100ESC	6	60-100	0.5	5.5	1100*720*1365	272
CWNA0.8-6/100ESC	6	60-100	0.8	7.5		273
CWNA0.5-6/200ESC	6	100-200	0.5	7.5		273
CWNA0.5-6/350ESC	6	200-350	0.5	7.5		273

- 1、If you have any other requirements, please contact with CROWNWELL.
- 2、All parameters are subject to change without prior notice.



High pressure storage system



Distributor

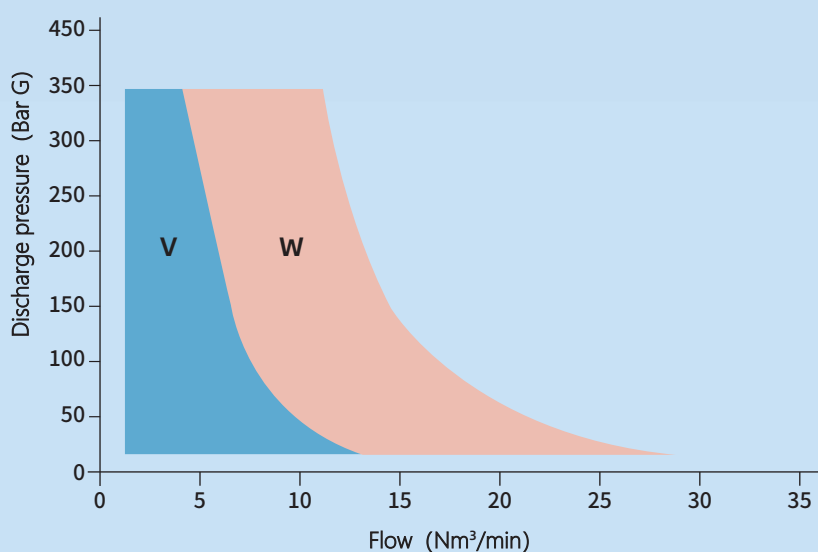
CWHGB Series Booster Compressors

[Overview Product Range]

The CWHGB series booster compressors are widely used for air and nitrogen.

Various

Design version



Suction pressure: 2-60Bar
Discharge pressure: 10-500Bar

Flow: 1-60 m³/min
Power: 15-160Kw

*The above parameters are calculated based on the suction pressure of 8BarG.

*Please contact CROWNWELL for selection.

[Design Features/Compressor]

The air-cooled block design is specifically designed for air/nitrogen booster, meeting complex and demanding application environments.

Multi stage compression, reducing each stage load, single action, deep fin cylinder, increasing the reliability of unit operation.

The well-chosen high quality suction valves, discharge valves, safety valves are suitable for various operating conditions.



V series



W series

[Design Features/Cooling]

Deep finned cylinders and cylinder head fins, oversized cooler design, effectively reducing temperature at all stages during operation.

The crankshaft drives a cooling fan to provide forced cooling for the block and coolers.

Air or water cooled coolers can be selected based on actual operating conditions.

[Design Features/Lubrication]

Forced feed lubricating by a gear pump provides perfect lubrication for various moving parts.

The lubricating oil monitoring system ensures the reliable operation of the unit.

The lubricating oil filtration system precisely filters the lubricating oil to ensure the safety of the unit.

CROWNWELL offers field

proven Air/Nitrogen Booster Compressors system in skid-mounted

*configurations that combine ruggedness with simplicity of
design for low maintenance and long life*

[Design Features]

Our universal modular design brings more flexibility and convenience to adjusting the combination of pistons, cylinders, cylinder heads, and valves, enabling us to provide customers with more efficient and economical systems. Our design features and advantages determine that our unit can withstand the test of time and gain user recognition.

- Easy to install and maintain
- Good balance and low vibration
- Low maintenance workload and operating costs
- Low compression ratio and temperature rise
- No special foundation requirements
- High operational efficiency
- Designed for continuous operation, suitable for heavy duty work
- Max. working pressure is 500Bar
- Low noise

Air/Nitrogen Compressors system with a Reputation for **Innovation, Quality and Reliability**

[Custom Built Skid-Mounted Air/Nitrogen Comperssor System]

- Suction pressure no need for pressure reduction, energy saving and consumption reduction.
- Suction protection system, including intake pressure monitoring, intake filtration, etc., protects the stable and reliable operation of the unit.
- Modular design of the block, with multiple frames and cylinders to choose from, and reasonable matching of compression stages and cylinder sizes according to customer needs, ensuring low pressure ratios at all stages and low operating temperatures.
- The fully automatic PLC control system can realize un attended operation of the unit; Real time monitoring of various operating parameters of the unit to ensure reliable and safe operation of the unit.
- Fully skid mounted design, all components are installed on a common baseplate, which can achieve no foundation installation and meet the requirements of vehicle operation.



[Turnkey Solution]

- Desiel engine driven
- Motor-engine dual driven
- Power take-off driven
- Direct coupling driven
- Water cooled
- Cabinet design
- Scilent drsign
- Low temperature design
- Explosion-proof design
- Design for marine application

*FOR MORE THAN 30 YEARS
WE'VE BEEN FINDING BETTER WAYS
TO COMPRESS AIR & GAS*

**HIGH PRESSURE
HIGH QUALITY**
 **Crownwell**



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